How the freeze of 1947 gave Liverpool FC a warm glow

Description

The February of 1947 was the coldest on record in the UK since 1910. Between January and March 1947, there were 55 consecutive days with snow falling somewhere in the UK. The impacts on post-war Britain were enormous.

Mark Platt of Liverpool Football Club describes how the winter of 1947 caused problems for the club, but gave the team the ultimate chance to shine.

For Liverpool FC, the inaugural post-war Football League of the 1946/47 season was one of the most memorable in its rich and illustrious history. The style in which they won the First Division Championship that year was to set a precedent for future Anfield success and it was achieved against all the odds; an ultimate triumph against adversity that the British weather did its best to scupper.

An impression of a Liverpool FC training session in February 1947 prior to the famous Stubbins' flying header. Still photograph courtesy: Liverpool Echo. Video animation: Met Office.

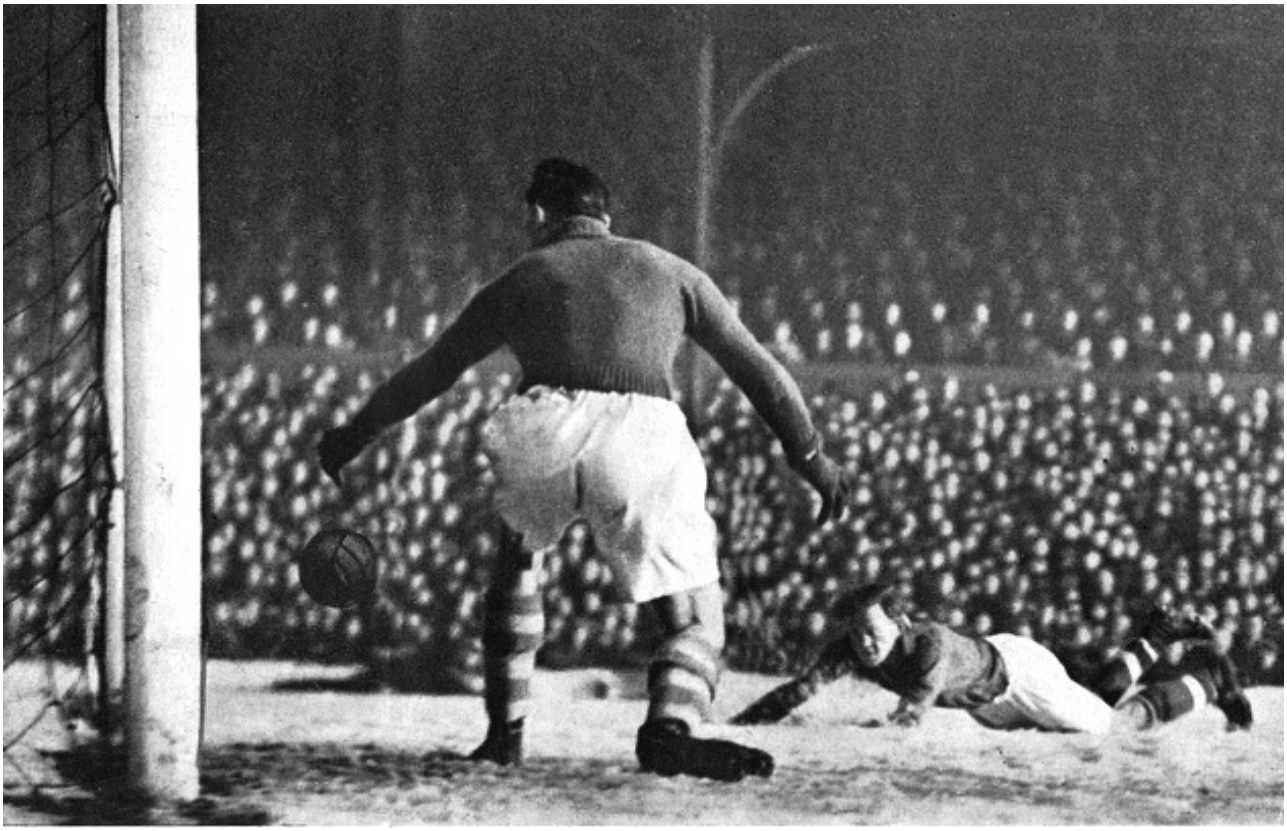
Amid the bleak austerity of a war-ravaged nation and continued rationing, the return of regular competitive football had been eagerly anticipated. Crowds flocked back to the game in record numbers and the British public revelled in its favourite pastime once again.

Liverpool, deemed as unlikely title challengers in pre-season, made a steady start. On the last day of

August they opened their campaign with victory at Sheffield United, a game that kicked off in a monsoon and was played under dark thunder clouds. Such unseasonal conditions set the tone for the remainder of a season that would be dominated by the extreme and unpredictable weather.

Just a few weeks later, young Liverpool supporters were being passed out of a sweltering Kop as the country basked in an Indian summer. It wasn't long before dense freezing fog then started to play havoc with transportation to and from games, while gale-force winds often hampered attempts to play good football.

Liverpool adapted better than most to these ever-changing climates and a run of victories saw them shoot to the top of the table in the run-up to Christmas. Then one of the worst winters on record kicked in and pitches became treacherous ice-rinks. When the thaw set in they were transformed into unplayable quagmires. Getting the ball under control and passing it, even a short distance, was becoming increasingly difficult.



Albert Stubbins' famous 'goal in the snow' has been dubbed by the Anfield faithful as the one of the greatest ever scored. Picture courtesy Liverpool FC

If the players had it bad, so too did supporters. As the snowstorms worsened, attending gamesbecame more hazardous. In a bid to prevent the country from grinding to a halt, the governmentordered a widespread industrial shutdown and the knock-on effects were felt at the turnstiles. Rail androad links slowly ground to a halt, city streets were plunged into darkness and many factories wereforced to close, meaning millions found themselves temporarily out of work. Due to a severe papershortage, the size of match-day programmes were also significantly reduced, some to just a singlesheet.

As the Arctic conditions continued to take a vice-like grip across Britain during the early months of 1947 matches were falling foul of the weather on a regular basis. The fixture list was soon decimated by postponements and Liverpool slithered back down the table. It peaked on Saturday 22 February when more than half that day's scheduled games were called off. Ironically, Liverpool's game at home to Huddersfield that afternoon did go ahead, but a new record had been set and it led to calls for the campaign to be extended.

When repeated pleas fell on deaf ears, the entire structure of football in this country was in danger of complete collapse. Thankfully, the authorities eventually saw sense. Although not before the touchlines at Anfield had to be painted blue to make them visible on a surface described as a 'sea of porridge' for the visit of Blackburn Rovers at the beginning of March, or when star centre-forward of the time Albert Stubbins lacerated his knees by sliding on the ice in celebration of a now famous diving header against Birmingham City. It was a goal that has gone down in Anfield folklore as one of the greatest ever scored, known simply as 'the goal in the snow'.

A six-week extension to the season was granted. Playing conditions improved and Liverpool rediscovered their form. When they travelled to Wolverhampton on May 31 to contest their final game of a seemingly never-ending season, they did so on what was the hottest day of the year so far.

The pitch side temperature at a sun-baked Molineux was in the high nineties and the match officials sported unfamiliar white jerseys. For spectators, shirt sleeves, summer frocks and handkerchiefs on heads were the order of the day – a stark contrast to the bitter cold they'd been used to just a few months previous. 'Hotter than the Melbourne Cricket Ground' being one newspaper description of the scenes.

A 2-1 win ensured that the red hot Reds completed their league season back in pole position. However, because of the fixture backlog caused by that gruelling winter of discontent, one outstanding game remained and it didn't take place until a fortnight later. If Stoke City beat Sheffield United they would pip Liverpool to the title. It was to be an agonising wait but one that, for every Liverpudlian, was well worth waiting for.

On June 14 at Bramall Lane, the venue where Liverpool opened the season almost ten months before, Stoke failed to get the result they so desired. The weather-beaten 1946/47 season, the longest ever known, was finally over and the pot of gold at the end of the rainbow was Liverpool's fifth League Championship.

Date Created
March 2017

Cyclone Enawo heading for Madagascar

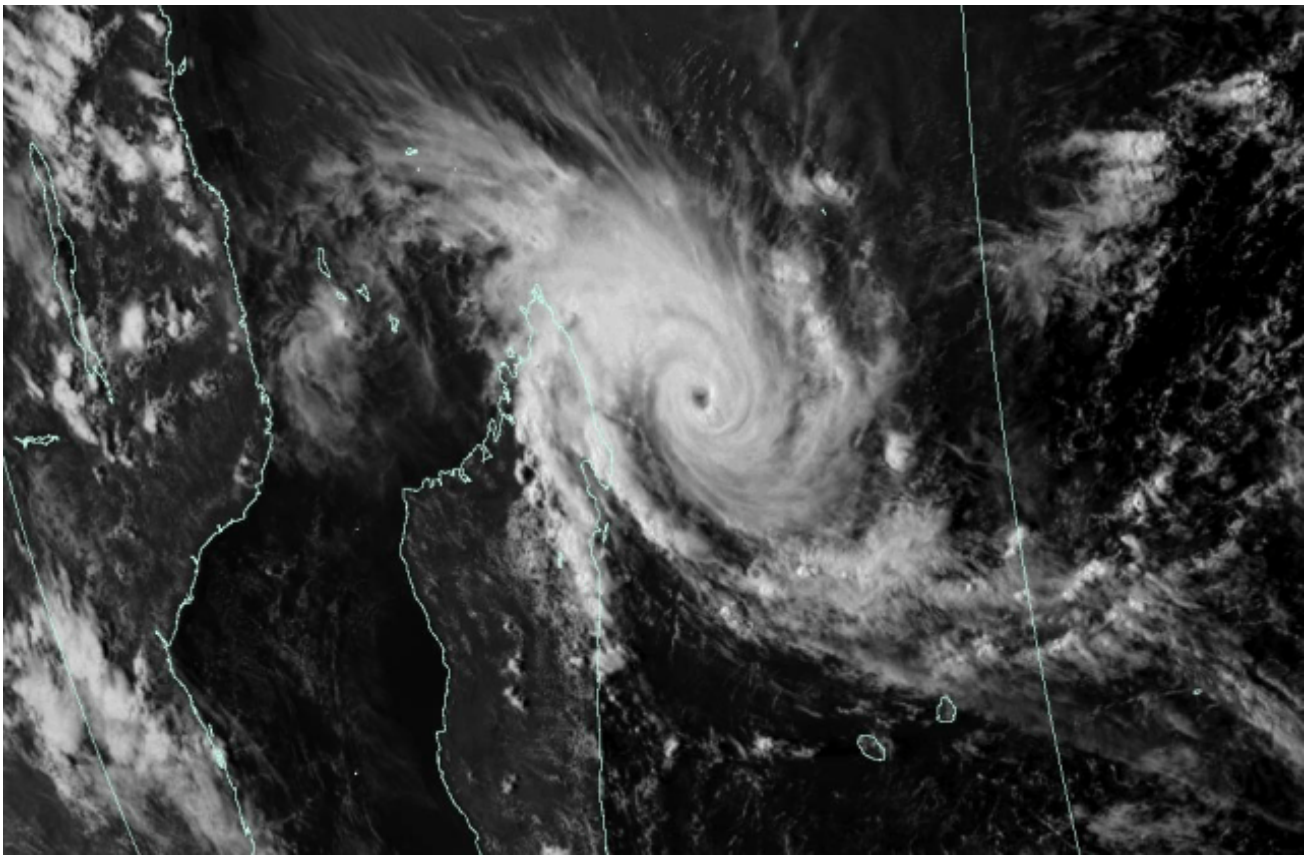
Description

Cyclone Enawo is at present just to the east of northern Madagascar in the South Indian Ocean, with 10-minute averaged wind speeds near 105 mph and much higher gusts.

The 2016-17 cyclone season has seen record low levels of activity with only six named tropical cyclones occurring across the whole southern hemisphere prior to this weekend. The southern hemisphere tropical cyclone season runs from about October to April across the South Indian Ocean, around Australia and in the South Pacific.

At the weekend Tropical Cyclone Blanche developed north of Australia and tracked across Bathurst Island bringing a local record of 384 mm (15.1”) rain in 24 hours. Blanche has now made landfall over a relatively sparsely populated part of the Kimberley coast of Western Australia and is expected to continue moving inland bringing heavy rain.

Meanwhile Cyclone Enawo is expected to make landfall tomorrow morning UK time. There are likely to be impacts from wind near the coast, but of greater concern are huge amounts of rain with 750 mm possible in some locations as the cyclone moves inland and turns southwards. Madagascar has suffered drought conditions in recent months, so whilst rainfall is welcome, this quantity over a very short period of time is likely to cause damaging impacts across a large part of the country.


Cyclone Enawo on 6 March 2017

Madagascar is familiar with cyclones and over recent years several have caused damage, destruction and loss of life. The most recent was Tropical Storm Chedza in January 2015 which caused severe flooding and 80 fatalities after making landfall on the western side of the island. A year earlier Cyclone Hellen struck the north-western side of Madagascar before moving back out to sea. In 2013 the far south-western part of the island was affected by Cyclone Haruna resulting in much wind damage, floods and the loss of 26 lives. In 2012 strong Cyclone Giovanna stuck the central part of the east coast again causing damage and loss of life.

The last cyclone to strike the north-eastern part of Madagascar where Enawo is expected to make landfall was Cyclone Bingiza in 2011. High winds and heavy rain caused much damage in the region and 34 lives were lost.

Further Information

Official warnings for the latest tropical cyclones in the Southwest Indian Ocean are issued by the Météo France à La Réunion. The Met Office routinely supplies predictions of cyclone tracks from its global forecast model to regional meteorological centres worldwide, which are used along with guidance from other models in the production of forecasts and guidance. We also provide updates on current tropical storms via @metofficestorms on Twitter.

Date Created
March 2017

Will you #BeBoldForChange on International Women's Day 2017?

Description

Met Office meteorologist Alison Davies was one of just four UK women invited to join a trip of a lifetime to Antarctica last December (2016) to advance her knowledge of polar science while developing leadership skills. The international expedition was one of many opportunities which have been afforded to female scientists in the last year, helping extend their role within the Met Office, meteorology and science as a whole.

International Women's Day 2017 is calling for groundbreaking action that will truly drive change for women. With women making up less than a third of meteorology and hydrology professionals, the Met Office actively supports STEM (science, technology, engineering and mathematics) outreach work including training courses and international fellowships. Ensuring women have equal access to science education and technology is essential if women are to be fully represented amongst the developers of weather and climate services.

With some survey's predicting the gender gap won't close entirely until 2186, the Met Office has committed to respecting and valuing diversity and supporting men and women to achieve their ambitions. Our international development team has been working with the WMO (World Meteorological Organization) to look at gender equality at a policy level and ways to incorporate valuable knowledge from women into building societies which are resilient to changing climates. Met Office is also working with WMO to understand how we can ensure the skills of women who work in weather and climate science are not lost when shift patterns are no longer possible with family commitments.

Meteorologist Claudia Riedl reaches new heights in her career at Austria’s Sonnblick Observatory.

Working in partnership with the WMO we hope to better understand and provide ways in which women and men access and use weather and climate information for greater resilience, preparedness and communication around weather-related disasters.

Met Office Chief Executive Rob Varley sits on the WMO Executive Council Panel of Experts on Gender Mainstreaming. He said: “Our involvement in this panel allows us not only to consider how we can improve Met Office gender equality practices, but also to contribute to the development of good practice across the global meteorological community”.

Developing weather and climate services

Weather and climate-related disasters can affect men and women differently, so ensuring both genders are encouraged to engage in plans to mitigate disaster risk is crucial.

Our experience of developing weather and climate services across the globe includes disaster risk exercises to explore the development and communication of severe weather warnings. Making sure a cross-section of stakeholder groups, including women, take part in these exercises is crucial to ensuring the resulting plans are adapted to local context.

Sarah Davies, Senior Met Office Advisor (Civil Contingencies), at a stakeholder workshop in Fiji

#BeingBoldForChange

From policy development into practical application, developing and providing sustainable weather and climate information empowers people to take action to protect their lives and livelihoods.

Today, International Women's Day, March 8, gives us an opportunity to highlight how the Met Office and the global meteorological community are essential to providing life-saving knowledge to people in a diverse and equal way. #BeingBoldForChange

Date Created
March 2017

What weather can we expect for Easter and May?

Description

There have been some reports in the media that the Met Office has forecast a freezing Easter and icy May for the UK with headlines such as *'Wild weather is set to hit the UK with a 'polar vortex' forecast and temperatures threatening to plummet to as low as -8C in the run up to Easter*.' and '*The next three months will see March storms, below freezing temperatures in April along with expected snow- before a 'sizzling May' with heights of 26C*'.

These predictions seem to have been based, in part, on the latest Met Office three month outlook for contingency planners, but our outlooks do not tell us the weather for specific days in the coming months.

The science of long-range forecasting is at the cutting edge of meteorology and the Met Office is leading the way with research in this area. However, with Easter over a month away it is too early to be able to predict the weather with any certainty.

As we've discussed previously, the outlook is not a normal weather forecast. It's a forward look at the probability of the broad weather themes that might occur in the next 3 months, and is useful for those who plan for various contingencies based on their likelihood. It assesses the chances of five different scenarios for both temperature and rainfall for the whole of the UK for the next three months. It does not give an indication of what the weather will be like at specific times or for events such as those referred to in the recent media articles.

Some of these reports predict we could be in for some bitterly cold, freezing weather, but our 3-month outlook doesn't specify that cold weather will occur.

What does the current outlook say?

The outlook for March, April and May as a whole talks about competing influences governing the UK weather this spring, from unsettled Atlantic weather patterns to more settled weather due to blocked, anticyclonic conditions.

After the wet and mild start to March, later in the month and in early April a greater likelihood of blocking patterns leads to more even chances of milder and colder-than average weather. Over the three month period as a whole, however, there is an increased chance of above-normal temperatures and a decreased chance of below-normal temperatures.

Its important to note that this tendency is for UK temperature on average. This takes into account both day- and night-time temperatures over the UK as a whole – conditions will vary at different locations; one area could be warmer than average over the three months while another is colder giving an average result overall.

The outlook also indicates there is only a slight increase in the chances of above-average rainfall in the

next three months; essentially the probabilities of above and below-average rainfall are similar to normal.

Currently, therefore, we cannot say whether we will get a ‘bone chilling’ Easter with ’snow and ice sparking travel chaos’ or whether there will be a ‘heatwave’ in May. The 3-month outlook can only highlight the general trends in temperatures or rainfall over the whole period.

We will undoubtedly get both wet and windy and dry and sunny spells of weather as the season progresses, and these will be picked up in our accurate seven day forecasts, as well as our 30 day forecast which gives a more general view of the weather ahead. In addition, our weather warnings will provide advice during any spells of extreme weather.

Date Created
March 2017

Will ‘Storm Stella’ affect the UK?

Description

There’s been some media speculation that a storm which brought snow and blizzard conditions to the United States, from Virginia to Maine, is now heading towards the UK. Whilst this makes great headlines, it is not quite the case.

The storm, named “Stella” by some in the US, brought around 16 inches of snow to parts of Pennsylvania and around 7 or 8 inches to New York state, is moving away northeast, changing its characteristics as it does so, as commonly happens as storms cross the Atlantic. Ultimately some remnants of it are heading well to the north of the UK towards Iceland, drawing mild and unsettled conditions from across the Atlantic to our shores for the end of the week and the weekend.

Here in the UK we are in for a blustery and wet Friday and weekend however this is a spell of fairly typical spring weather with strong to gale force winds, rain and spells of blustery sunshine for many. We could even see some snow over high ground in Scotland.

A strong jet stream is helping drive this unsettled weather our way. This is due in part to a big temperature contrast between areas of warm air and cold air in the United States at the moment. Alex Deakin explains all this in more detail.

Forecast

Tomorrow starts cloudy for many with outbreaks of rain and drizzle gradually moving south-east followed by sunshine and showers in to the north.

Then as we head into Friday and the weekend it turns unsettled with bands of rain pushing in from the west. Hill snow and patchy ice are likely at times across Scotland and it will turn windy for all.

As always keep up to date with the weather in your area using our forecast pages, Twitter or Facebook , as well as using our new mobile app which is available for iPhone from the App store and for Android from the Google Play store. Search for “Met Office” in store.

Date Created
March 2017

Rainforests: exploring the global weather maker

Description

The belt of rainforests around the tropics may seem distant from most people's day-to-day lives in the UK but these rich areas provide many essential services – such as providing key foodstuffs and helping to regulate the climate – that it has been all too easy to take for granted, until now.

A major new exhibit – which has opened this month – at Cornwall's Eden Project aims to highlight the extensive links between climate and rainforests in a series of installations known as The Weather Maker. This forms part of the latest phase of the Eden Project's Rainforest Canopy Walkway enabling people to explore the world's largest indoor rainforest from the treetops.

A series of Weather Maker exhibits in the Eden Project's Rainforest Biome explore the links between tropi

The Met Office's Professor Richard Betts has been assisting the Eden Project with the exhibit in the rainforest biome. He said: "Rainforests are well named because they have a two-way relationship with the weather. These extensive blankets of forest actually help create rain, as warm moist air rises above the forests. The winds carry moisture from over the ocean, which falls out as rain and is then recycled back to the atmosphere through evaporation.

"As water evaporates from leaves this has a cooling effect and this effect is amplified as the moisture rises to form clouds above the forest which help to reflect sunlight.

"Beyond the forests themselves, rainforests have an influence on the global climate by stimulating the

rows.

“2015 and 2016 were the warmest years in a record stretching back to 1850. At a time when we are reaching new global extremes, scientists are beginning to unravel the numerous bonds between rainforests and the climate. One of the key allies in helping to ameliorate the changing climate is itself under stress as these once seemingly endless evergreen blankets are being eroded through deforestation. These actions are leading to more carbon dioxide entering the atmosphere, further fuelling the cycle of change. While deforestation is slowing in some areas, it is continuing in others.”

The complexities of the rainforest and climate cycle are being brought to life in the Eden Project’s Rainforest Biome with the Weather Maker exhibit, which includes installations exploring how the world’s rainforests act as air movers, water sweaters, flood defenders, rain makers, sun reflectors and carbon catchers. The Eden Project team has worked with climate scientists, including Professor Richard Betts, from the Met Office Hadley Centre and the University of Exeter, to gain access to the latest research exploring the links between rainforests and climate.

Speaking at the opening event, Dr Jo Elworthy, Director of Interpretation at the Eden Project, said: “Fifteen years after opening, our forest has grown sufficiently to take our visitors into the treetops. From on high, visitors will be able to explore the forest’s hidden secrets and discover how the world’s hot, steamy rainforests help to regulate the climate.”

The experience of visiting a rainforest may seem a distant dream for many, but this doesn’t stop the need for people to understand the importance of these rich and humid landscapes.

Experts from the Met Office help Eden Project visitors understand more about the earth's climate.

In addition to providing assistance with the Weather Maker exhibit, Met Office staff have also been helping visitors to understand the role of rainforests and climate through interactive exhibits and educational experiments.

Felicity Liggins of the Met Office said: "We visited the Eden Project on the Weather Maker's opening weekend. It was fantastic to be involved with helping people appreciate the value of rainforests to the weather and climate, especially in such a stunning environment. The team at the Eden Project have done a great job in making the biome feel as much like a rainforest as possible."

Date Created
March 2017

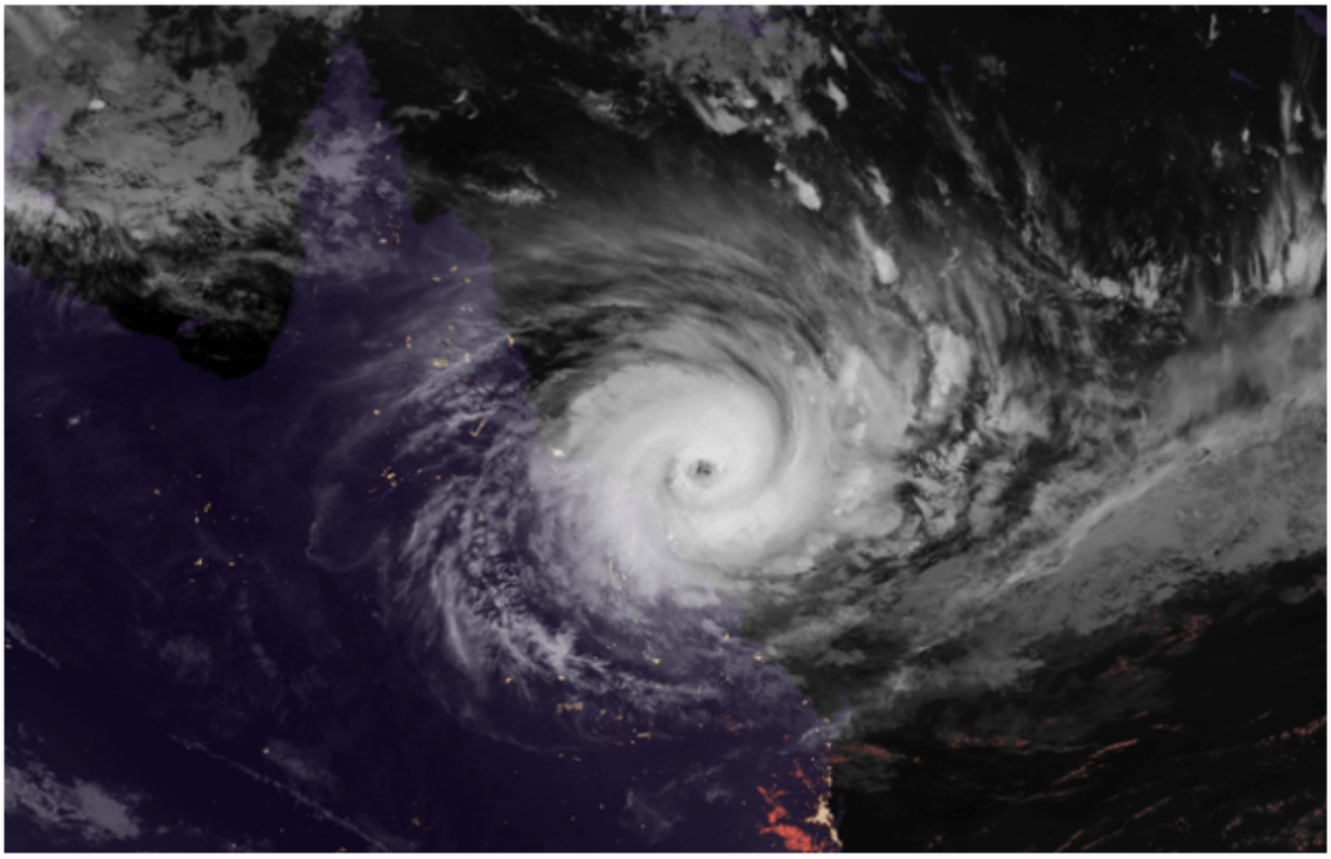
Cyclone Debbie arrives in Queensland

Description

Cyclone Debbie made landfall over the coast of Queensland, Australia in the early hours of this morning UK time bringing high winds, storm surge and heavy rain. Queensland is no stranger to strong cyclones having been struck by Cyclones Marcia and Nathan in 2015, Cyclone Ita in 2014 and Cyclone Yasi in 2011.

Debbie formed late last week in the Coral Sea and was the first cyclone to form close to the eastern side of Australia in what has been a very quiet season across the southern hemisphere as a whole. Debbie strengthened throughout the day yesterday as it started to move across the Whitsunday Islands. When just a little distance offshore, the cyclone's forward motion slowed resulting in many hours of extremely strong winds over some of the islands.

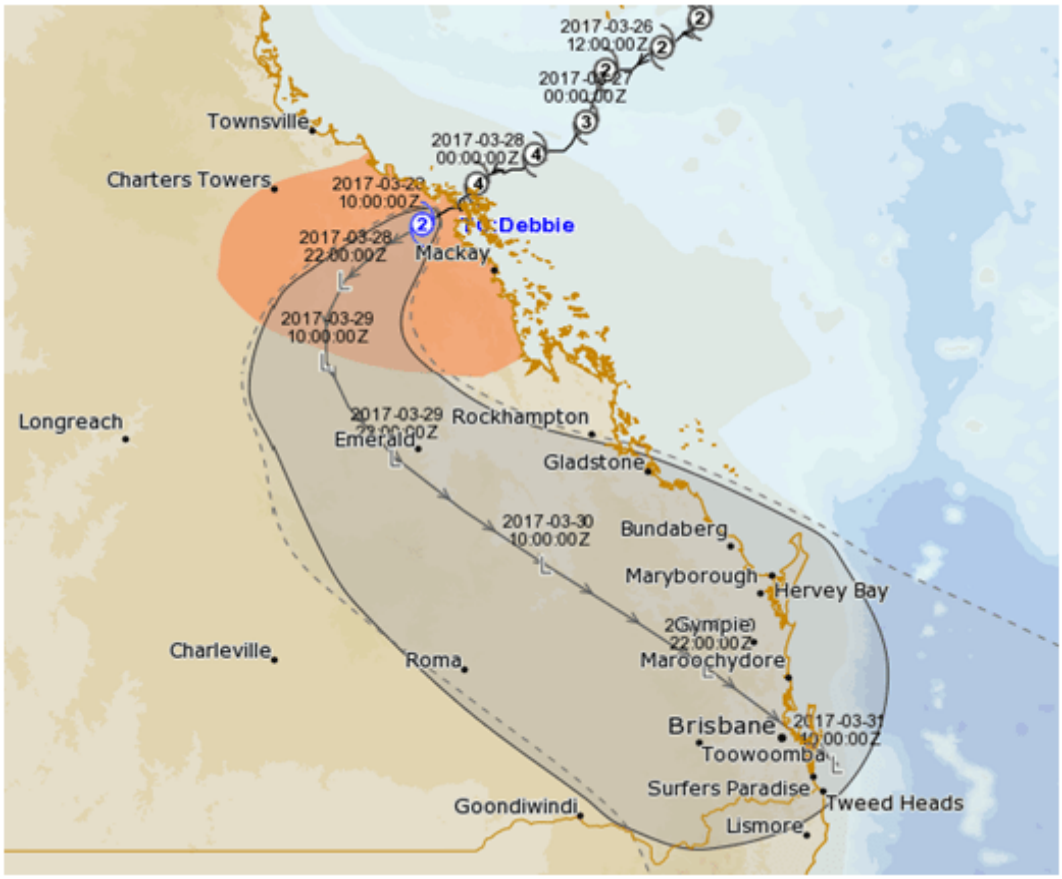
The observing station at Hamilton Island experienced sustained winds of hurricane force (74 mph or greater) for almost 12 hours and a peak wind gust of 163 mph. This location was extremely exposed to the strong winds on the southern flank of the cyclone and as Debbie came ashore over mainland Queensland winds were not as strong as this, although from reports being received were still very damaging.



Cyclone Debbie approaching Queensland on 28 March 2017. Credit CIRA/RAMMB.

Cyclone Debbie made landfall near the small town of Airlie Beach and is now slowly moving inland and starting to weaken. Many locations in the cyclone's path have so far received 150-200 mm rain. Although the threat from wind will continue to recede, Debbie is likely to pose a continuing threat from rain for several days to come as it weakens into a tropical low pressure system.

The latest forecast track turns Debbie sharply south and then south-east, with the remnant low pressure area tracking back towards the coast and passing over Brisbane before heading back out to sea. Rainfall totals of 250 mm are expected widely along Debbie's path with higher totals in some locations. This is likely to lead to river flooding in many areas of south-east Queensland over the next few days.



Latest Bureau of Meteorology Forecast for Cyclone Debbie

Further Information

Official warnings for the latest tropical cyclones in the Australian region are issued by the Bureau of Meteorology. The Met Office routinely supplies predictions of cyclone tracks from its global forecast model to regional meteorological centres worldwide, which are used along with guidance from other models in the production of forecasts and guidance. We also provide updates on current tropical storms via @metofficestorms on Twitter.

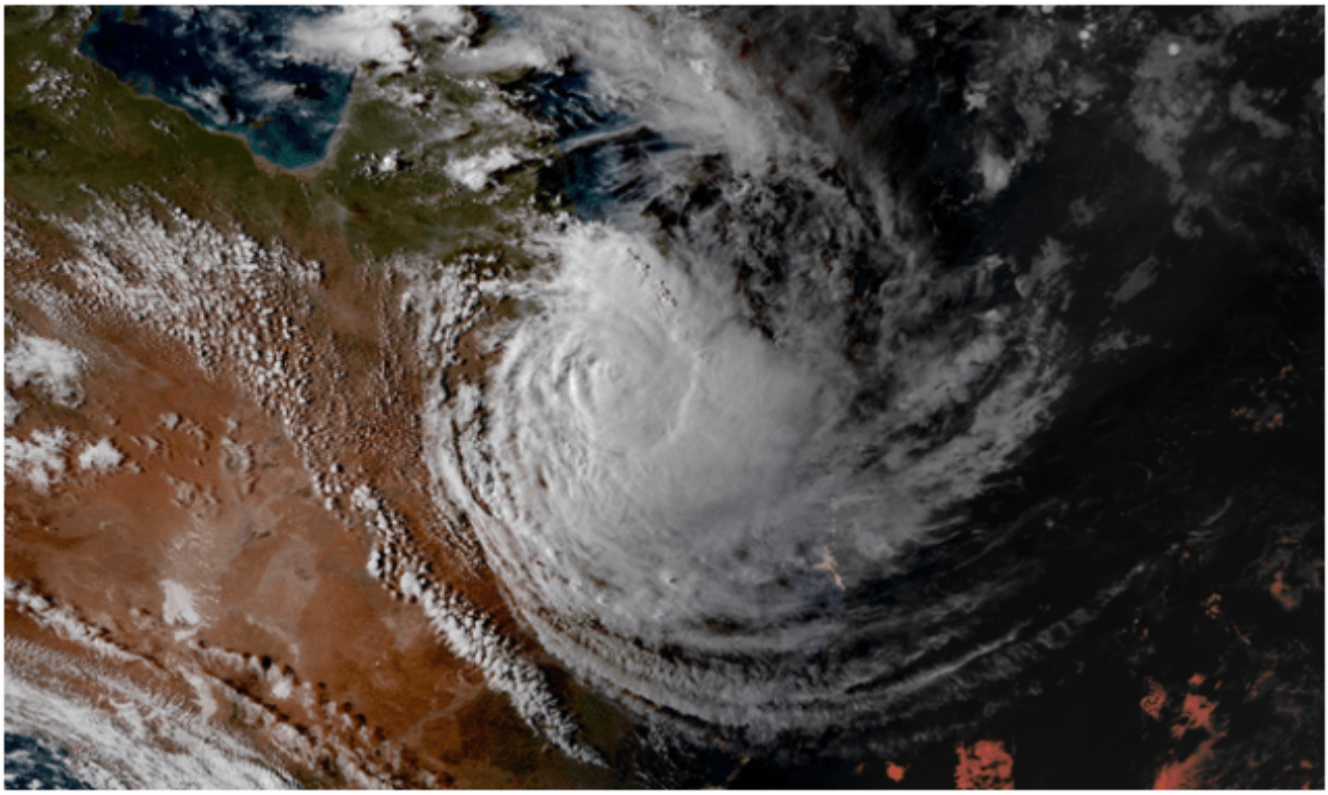
Date Created
March 2017

Ex-Cyclone Debbie continues to bring heavy rain

Description

Cyclone Debbie made landfall over the coast of Queensland Australia on Tuesday producing severe wind damage to properties in areas close to the eye including the towns of Bowen and Proserpine.

Debbie gradually moved inland and as winds eased the cyclone was downgraded to a tropical low pressure system. However, heavy rain has continued particularly to the south of the low centre where winds were blowing inland from the ocean. Some remarkable rainfall totals have been recorded in the Clarke Range mountains located some 30 km from the coast. In just over three days Mount William has recorded over 1300 mm (51”) rain. Even at lower levels rainfall totals of 250-500 mm (10-20”) have been widely reported. This is likely to result in flooding over the next few days as the rainfall works it’s way through river catchments.



Ex-Cyclone Debbie over Queensland on 29 March 2017. Picture courtesy of CIRA/RAMMB

Ex-Cyclone Debbie is now turning south-east and is expected to move back towards the coast and out to sea over the next 24-36 hours. The Bureau of Meteorology has issued weather warnings for an area over 1000 km in length from Bowen in the north to Brisbane and the Gold Coast in the south. Daily rainfall totals of 150-250 mm are possible with higher values in some localities causing major river flooding.

Further Information

Latest warnings on flooding in Queensland caused by ex-Cyclone Debbie and official warnings for the latest tropical cyclones in the Australian region are issued by the Bureau of Meteorology. The Met Office routinely supplies predictions of cyclone tracks from its global forecast model to regional meteorological centres worldwide, which are used along with guidance from other models in the production of forecasts and guidance. We also provide updates on current tropical storms via @metofficestorms on Twitter.

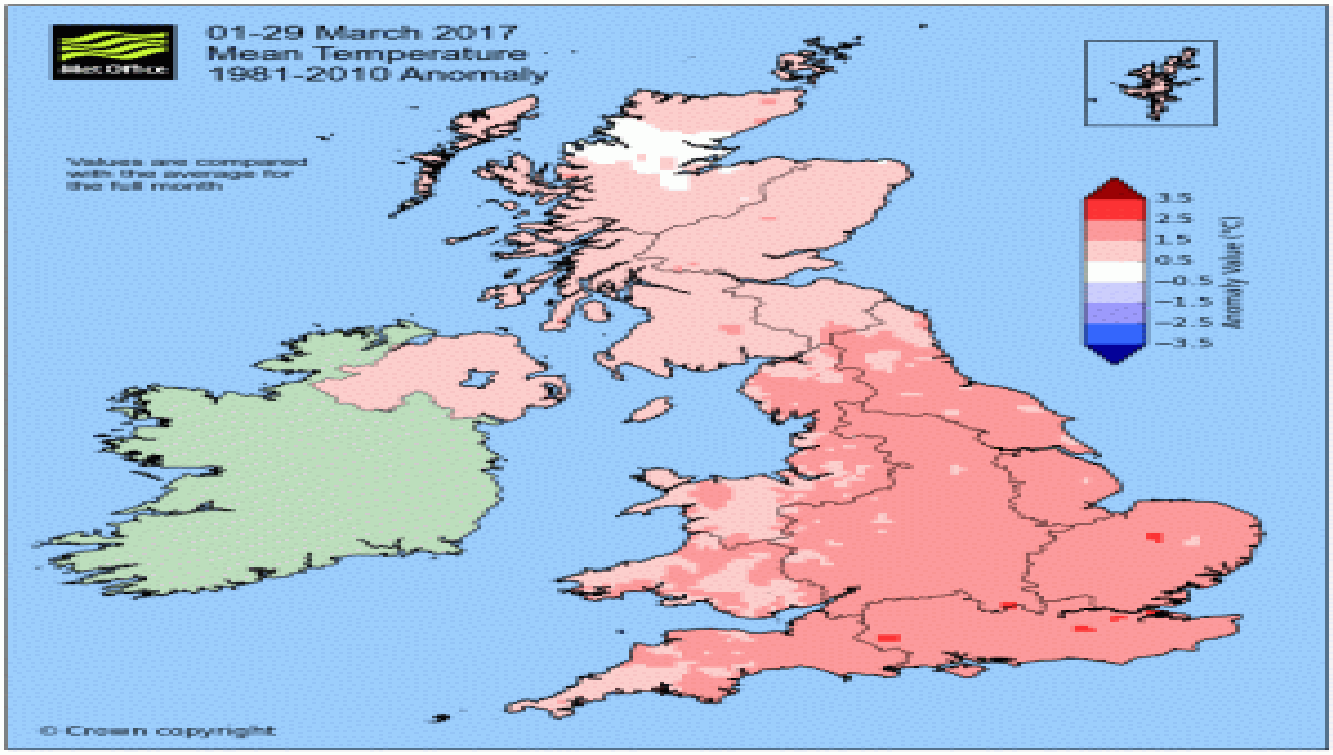
Date Created
March 2017

March 2017: rather warm and dry for some

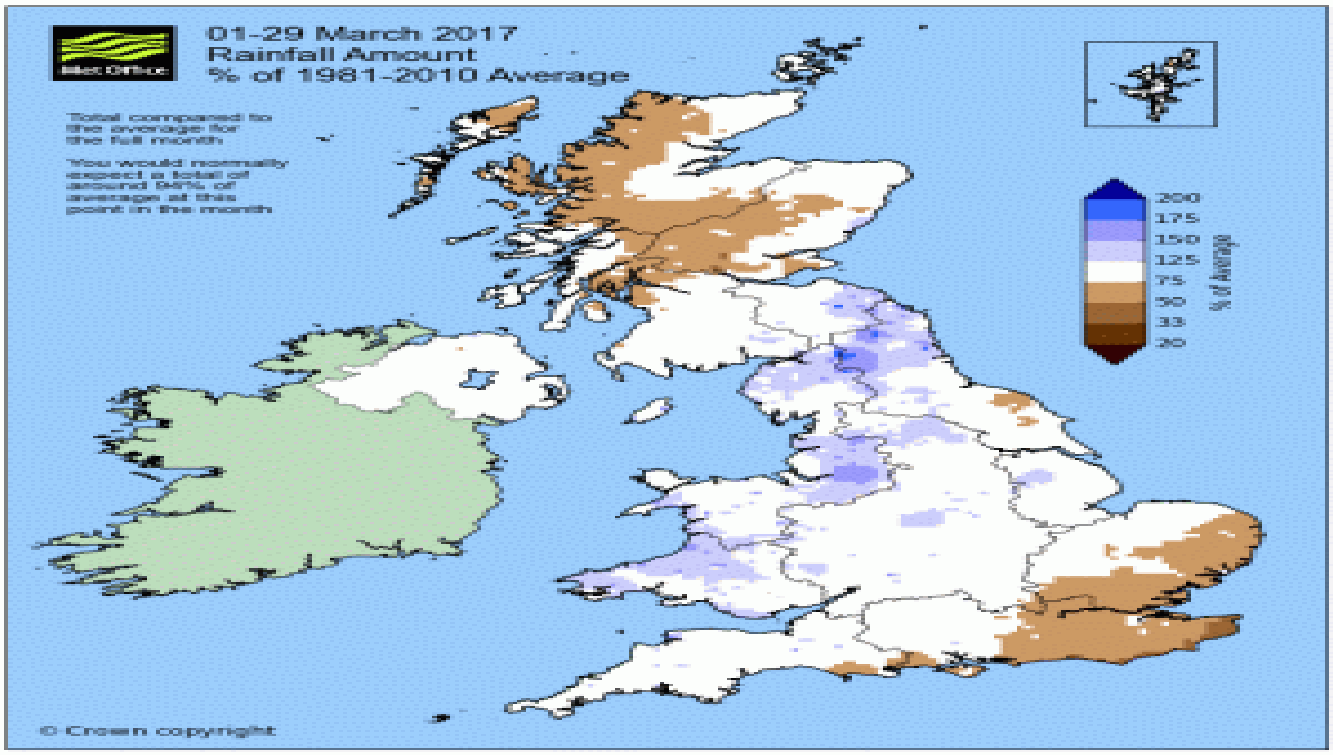
Description

Provisional climate statistics up to the 29 March reveal that March 2017 has been a relatively warm month and has been rather dry in South-East England.

Despite a colder interlude in the third week of the month – which brought some frosts and snowfall in northern areas – the mean temperatures during March were above average for all parts of the UK. Indeed, the average temperature for March 2017 in south-east England is currently running as the second warmest March in a series stretching back to 1910. Across the UK it is currently running as the ninth warmest.



Underlining the month's generally warm feel, a number of long-running English weather stations – from Cornwall to Yorkshire – recorded their highest daily minimum March temperatures. Additionally, long-running climate sites in Hampshire and Wiltshire (Farnborough, Larkhill, Boscombe) have for the first time in their records had a March without any air frost days.



Emphasising the warmth in south-east England, Middlesex was the historic county recording both the highest maximum average temperature and the highest average mean temperature: 13.6 °C and 9.8

°C, respectively. Middlesex was also one of a number of counties, including Essex, Hertfordshire and Surrey, which recorded the highest average March temperatures relative to their county's respective long-term average (2.3 °C above the 1981–2010 climate average for March).

The highest temperature recorded so far this month is 22.1 °C at Gravesend, in Kent, on Thursday 30 March. Tim Legg – a climate scientist in the Met Office's National Climate Information Centre – said: "It is very rare to go above 22 °C in March, with only three years since 1968 recording 22 °C or above, these are: 17 March 1990, when 22.6 °C was recorded at High Beach; and 23.6 °C at Aboyne in 2012.

"After this we have to go way back to 29 March 1968, when we recorded 25.6 °C at Mepal in Cambridgeshire: currently the all-time March record."

Examining the provisional rainfall map for March (updated to March 29), it is clear that the majority of the UK enjoyed average rainfall. However, parts of South-Eastern England and northern and western Scotland received much lower rainfall than average.

Essex recorded the lowest total rainfall of any county in the UK, with just 26.2mm of rain falling up to the 29 March. Sussex was the UK historic county receiving the least rainfall compared with the long-term 1981–2010 average, with just 59% of the average March rain total.

With parts of north-west Scotland drier than average, the relative lack of rain-bearing cloud correspondingly boosted sunshine figures, with the region recording 121.2 hours of sunshine. This is a 40 per cent increase on what is normally expected in March.

No named storms occurred during the month. However, as Tim Legg added: "The UK was fortunate not to be hit by a storm, which brought some exceptionally strong and damaging winds to northern France on 6 March."

Date Created
March 2017